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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,328	04/23/2001	John Zhu	50P4402.01	4086

7590 12/01/2004

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EXAMINER

LEZAK, ARRIENNE M

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,328

Applicant(s)

ZHU ET AL.

Examiner

Arrienne M. Lezak

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over extensive consideration of US Patent US 6,522,641 B1 to Siu.

3. Regarding Claims 1, 2, 6, 7, 12-14, 18, 22-25 & 29 Siu discloses an Internet packet (IP) mobile wireless communication system, method and network (Abstract) comprising:

- at least one network operation center (NOC), including at least one home domain having at least one associated home agent, (Figs. 5-7 and Cols. 5-8);
- plural base stations communicating with the NOC, each base station having at least one router and at least one foreign domain having at least one foreign agent, (Col. 1, lines 52-67; Col. 2, lines 1-4; and Col. 5, lines 37-53); and
- plural client devices in wireless IP communication with at least one base station, (Col. 1, lines 52-67 & Col. 2, lines 1-4), whereby a base station detecting a client device uses its associated foreign agent to

communicate at least one access request to the NOC, (Col. 6, lines 37-67; & Cols. 7 & 8);

- sending data to plural base stations and transmitting the data in IP format to at least one client device in wireless communication with at least one base station using a data transfer rate in excess of one megabyte per second, (per pending Claims 22-24), (Col. 5, lines 37-53; Col. 6, lines 37-67; & Cols. 7 & 8);
- wherein each client device is assigned an IP address and each base station stores accounting data related to network access of a client device through the base station, (per pending Claims 2, 12, 14 & 29), (Col. 5, lines 37-53), (Examiner notes that storage is a common equipment element – especially within Siu wherein the base station submits a request and awaits a response, thereby requiring a memory functionality for correlation purposes);
- wherein the NOC sends an acknowledgement of an access request to a base station to grant an access request from the base station, (per pending Claims 6, 12 & 18), (Col. 6, lines 37-67 & Cols. 7-8); and
- wherein mobile, up to the minute subscription services are provided to at least one client device by the NOC through at least one base station, (per pending Claims 7 & 12), (Col. 6, lines 37-67 & Cols. 7-8).

4. Examiner notes that Siu discloses a subnet controller, (Col. 5, lines 54-63), which controller controls a segment of the network, (Figs. 5 & 6), and which controller contains

an interface for connecting to the network management center. Examiner finds that it would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to have the subnet controller located within the network management center wherein network traffic would be minimized, particularly within smaller networks.

Moreover, per Applicant's "network operation center", (NOC), as noted within Applicant's specification, Examiner notes that the functionalities incorporated within the subnet controller serve to recognize and maintain account data for client devices on the network, which functionalities read upon those functionalities essential to Applicant's NOC. Moreover, as Siu teaches an IP network, Examiner finds the use of domain names/IP addresses for identification purposes and domain agents for transportation purposes to be obvious. Thus, Claims 1, 2, 6, 7, 12-14, 18, 22-25 & 29 are found to be unpatentable over considerable consideration of the teachings of Siu.

5. Regarding Claims 3 & 15, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein the accounting data is sent to the NOC, (subnet controller), for correlation thereof to a client device registered at the NOC, (Col. 5, lines 54-67 & Cols. 6-8). Thus, Claims 3 & 15 are found to be unpatentable over considerable consideration of the teachings of Siu.

6. Regarding Claims 4, 16, 26 & 27, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein the NOC, (subnet controller), grants an access request using the combination of the client IP address and the foreign agent name, (per pending Claims 26 & 27), when the client device associated with the request is registered at the NOC, (subnet controller), (Col. 6, lines

37-67 & Cols. 7-8). Examiner notes that Siu discloses an authentication system, which system renders obvious Applicant's specific access request means, as it would have been obvious to identify the client by its IP address and the base station by its foreign, (domain), name for purposes of authentication and communication generally within the Siu network. Thus, Claims 4, 16, 26 & 27 are found to be unpatentable over considerable consideration of the teachings of Siu.

7. Regarding Claims 5 & 17, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein the NOC, (subnet controller), stores information relative to each client device registered at the NOC, (Figs. 6-7; Col. 5, lines 54-67 & Cols. 6-8). Thus, Claims 5 & 17 are found to be unpatentable over considerable consideration of the teachings of Siu.

8. Regarding Claims 8 & 19, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein each router includes information to enable the router to recognize IP packets from foreign agents and home agents, Col. 5, lines 37-67 & Cols. 6-8). Examiner notes that Siu discloses optimized routing for the distribution network, (Figs. 5-7), which routing would obviously include recognition of all agent and related agent information. Thus, Claims 8 & 19 are found to be unpatentable over considerable consideration of the teachings of Siu.

9. Regarding Claims 9 & 20, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein the home agent informs foreign agents of types of client devices communicating on the system, (Col. 5, lines 54-67 & Cols. 6-8). Examiner notes that Siu discloses home agent, (subset controller),

communication with foreign agent, (base station), which communication would obviously include data concerning device types on the system, as the base station would need such information for efficient network communication and mitigation generally. Thus, Claims 9 & 20 are found to be unpatentable over considerable consideration of the teachings of Siu.

10. Regarding Claims 10, 21 & 30, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein a location of at least one client device is tracked and subscription services provided thereto based at least partially on the location, (Col. 5, lines 54-67 & Cols. 6-8). Examiner notes that Siu discloses a policy server to determine the rules and boundaries of the tunnel set-up, which rules and boundaries would obviously include a location parameter, as subscriptions defined by location are well-known in the art for billing purposes, (i.e.; long-distance vs. local calling and roaming charges). Thus, Claims 10, 21 & 30 are found to be unpatentable over considerable consideration of the teachings of Siu.

11. Regarding Claim 11, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, wherein each client device includes a directional antenna and an IP transceiver electrically coupled to the antenna for communicating with the base stations, (Col. 3, lines 29-38). Thus, Claim 11 is found to be unpatentable over considerable consideration of the teachings of Siu.

12. Regarding Claim 28, Siu discloses an Internet packet (IP) mobile wireless communication system, method and network, further comprising permitting a first client device to communicate with a second client device via at least one base station, Col. 4,

lines 44-67). Thus, Claim 28 is found to be unpatentable over considerable consideration of the teachings of Siu.

Conclusion

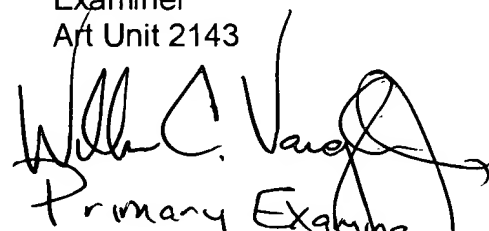
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AML

Arrienne M. Lezak
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